Request For Information

Enterprise Geographic Information Technology (GIT) Web Portal

State of Washington

06-RFI-001

Release Date: June 28, 2006

Washington State Department of Information Services

TABLE OF CONTENTS

1. INTRODUCTION

1.1. Background

The Department of Information Services (DIS) is a cabinet level agency within the executive branch of Washington State government organized to provide leadership and support for the use of information technology within state and local government. Statutes governing DIS functions (Chapter 43.105 RCW) require DIS to make available computing and telecommunications services for the discretionary use of state and local government agencies as well as not-for-profit corporations that receive public funds and have entered into a Customer Service Agreement with DIS.

As Washington moves new digital government initiatives forward, recognition of the remarkable value of Geographic Information Technology (GIT) is coming to light. GIT provides public policy makers and citizens with the tools to understand complex issues, create intuitive interfaces to information and identify and evaluate potential solutions.

Several Washington State agencies have established themselves individually as national leaders in the use of GIT in the areas of environmental and natural resource management and public health and safety programs. An enterprise approach to managing GIT will facilitate cross-agency collaboration and the integration of data and information. In this way, the state can reduce the likelihood of duplicated efforts, incompatible or conflicting datasets, and inconsistent analytical results.

GIT supports activities as wide ranging as transportation planning, natural resource and wildlife management, public safety, emergency response, homeland security, economic development and health and human services. GIT is a critical decision support tool for government policy makers and citizens as they seek solutions to these complex areas of concern. GIT provides the platform for assembling the data, performing analyses and communicating the results.

The Enterprise GIT Web Portal will provide a logically centralized web-based point of discovery and access to fundamental geographic data and applications.

1.2. Purpose of RFI

The purpose of this Request for Information (RFI) is to gain information to validate and refine as necessary the requirements and logical design of the proposed Washington State GIT Enterprise Portal. The information may become the basis for a competitive procurement for software and services to establish a GIT web portal for use by government employees, businesses and citizens of Washington State.

1.3 GIT Portal Description, Objectives and Guiding Principles

Description: The Enterprise GIT Portal is an application environment that provides a logically centralized web-based point of discovery and access to fundamental spatial data and applications. The portal will serve as the central point of access to significant state Geographic Information System resources. These resources will include distributed geospatial data and applications.

Objective: Design and implement an enhanced clearinghouse/portal that brings a high value service to the GIT enterprise by reducing the enterprise cost of data. The

portal will improve data access and integration, reduce the need to maintain redundant, inconsistent data and, improve data access and information utilization over the long-term. The portal will promote use of standardized data resulting in more efficient collaboration and better decisions.

Portal Guiding Principles: The following principles are to be applied while designing the portal. The GIT Portal will:

- Be able to discover and invoke services within a distributed network of geospatial services.
- Be a gateway to other services rather than an aggregation in a single location of all data or services. Some services and data may be resident on portal.
- Be an assembly of interoperable components that have open interfaces.
- Make use of the NSDI Clearinghouse network as a catalog of dataset-level metadata.
- Provide a thin-client human consumer interface with an integrated map viewer that is usable by standard web browsers.
- Provide a limited set of core functions, including the construction of OGC Web Service operation requests to obtain data that may be used by other, more specialized or more fully-featured thick-client applications.
- Support applicable Information Services Board Policy and Standards.

2. RFI SCHEDULE

Release of RFI	June 28, 2006
Vendor Questions Due by 4:00 p.m.	July 5, 2006
Responses to Vendor Questions Due by 4:00 p.m.	July 7, 2006
Vendor email notice of intent to respond Due by 4p.m.	July 10, 2006
Vendor submissions Due by 4:00 p.m.	July 14, 2006

3. ADMINISTRATIVE REQUIREMENTS

3.1. RFI Coordinator

Vendor communications concerning this RFI should be directed to the RFI Coordinator listed below:

RFI Coordinator	Jeff Holm
Physical Address	Department of Information Services 1110 Jefferson St SE Olympia, WA 98504-2445
Mailing Address	PO Box 42445 Olympia, WA 98504-2445
Phone	360-902-3447
E-mail	jeffh@dis.wa.gov

3.2. Response Preparation Instructions

Please provide your responses in an electronic format, such as Acrobat or Microsoft Word. This will assist in our review process. We value your time and do not want you to spend your time preparing lengthy responses.

Responses to this RFI should be submitted to the RFI Coordinator no later than Friday July 14 at 4:00 p.m., Pacific Daylight Time. Please do not cut and paste your responses into this RFI. Instead provide your response as a separate document and include numbers referencing the RFI section to which you are responding. Only the one electronic copy need be submitted.

E-mail is the preferred method of delivery. Please submit responses to the RFI Coordinator. The RFI Coordinator will email an acknowledgement of receipt to the vendor. Hardcopy responses and materials will be accepted; faxed responses will not.

3.3. Cost of Response Preparation

Vendors will not be reimbursed for costs associated with preparing or presenting any response to this RFI.

3.4. No Obligation

DIS plans to use the information gathered from this RFI process in a future procurement for an Enterprise GIT Portal. The release of this RFI, however, in no way obligates DIS to such course of action.

3.5. Response Property of DIS

All materials submitted in response to this RFI become the property of DIS. DIS has the right to use any of the ideas presented in any such materials.

3.6. Proprietary Information

Any information contained in the response that is proprietary or confidential must be clearly designated. ***Marking of the entire response as proprietary or confidential will neither be accepted nor honored***. DIS will not accept responses where pricing is marked proprietary or confidential.

To the extent consistent with chapter 42.17 RCW, the Public Disclosure Act, DIS will maintain the confidentiality of Vendor's information marked "confidential" or "proprietary." If a request is made to view Vendor's proprietary information, DIS will notify Vendor of the request and of the date that the records will be released to the requester unless Vendor obtains a court order enjoining that disclosure. If Vendor fails to obtain the court order enjoining disclosure, DIS will release the requested information on the date specified.

The DIS' sole responsibility will be limited to maintaining the above data in a secure area and to notify Vendor of any request(s) for disclosure for so long as DIS retains Vendor's information in DIS records per state law. Failure to so label such materials or failure to timely respond after notice of request for public disclosure has been given will be deemed a waiver by Vendor of any claim that such materials are exempt from disclosure.

3.7. Vendor Comments and Questions

Vendors may submit comments and questions to the RFI Coordinator prior to responding to the RFI by the date indicated in the RFI schedule in Section 2. Responses to Vendor questions will be considered addendums to the RFI. Modifications to the RFI that may result from Vendor comments will be sent to all Vendors. Where there appears to be a conflict between the RFI and any amendment or addenda issued, the last amendment or addendum issued will prevail.

4.0 GIT PORTAL RFI CRITERIA

The RFI is divided into the three sections listed below. Vendors are free to address some or all subsections under each criterion.

4.1. Overview of GIT Portal Requirements
4.2. Proposed Logical Design
4.3. Information Requested

Details for Requirements and the Proposed Logical Design are available online at wagic.wa.gov/gitea.

4.1. Overview of GIT Portal Requirements

This section presents a general overview of requirements for the GIT Portal and its architecture. See online documentation (wagic.wa.gov/gitea) for specific Functional Requirements of the Portal.

Organizations and individuals may have one or more of the following Roles in relation to the GIT Portal:

Resource Provider - Person or organization that owns or is responsible for a resource that is or may become available through the portal

Resource Consumer Person or entity that uses portal resources

Portal Administrator - Person who has GIT portal administrative responsibilities

The Portal will provide the ability for actors in those Roles to perform the functions documented in the proposed Logical Design. For the Consumer role, those functions include tasks such as these:

4.1.1. Discover geospatial information that has been documented with FGDC metadata (ISB/GIT standard applies for minimum).

4.1.2. Visualize geospatial information that is available through an OGC Web Map Service.

4.1.3. Obtain geospatial information that is available through OGC Web Feature Service or Web Coverage Service.

4.1.4. Be referred to information that is not available via OGC Web Services, but that has been documented and published in the NSDI Clearinghouse.

4.1.5. Specify or navigate to locations by place names, by explicit numeric coordinates, or by consumer interface actions.

4.1.6. The Portal Architecture Specification will provide enough detail to Document the GIT Portal implementation as described by GIT EA Documenter Team.

4.1.7. Enable possible future procurements of individual Portal components or an entire Portal assembly.

4.1.8. The Portal architecture will be based on open interoperability specifications to the maximum extent possible.

4.1.9. The Portal will use the state backbone network (SGN) and network technology standards.

4.1.10. Within the Portal Architecture, Resources include 'distributed geoprocessing resources' which are defined as information from multiple sources available as network-addressable instances of services including data services, portrayal services, metadata services and catalog services.

4.1.11. Catalog Services will provide a common mechanism to classify, register, describe, search, maintain and access information about resources.

4.1.12. Portal Data Themes will evolve over time to include the following Spatial Data types: (unranked list) Geodetic Control, Elevation, Orthoimagery, Hydrography, Transportation, Governmental Boundaries, Cadastral and other significant geospatial data.

4.2. Proposed GIT Portal Logical Design Model

The proposed logical structure of the GIT Portal Architecture is based on requirements reflected in the following Use Cases with associated scenarios:

4.2.1. **Discover Portal Resources** – Scenarios include: Search by; Location, Information Type and Browse Catalog

4.2.2. **Access Portal Resources** – Scenarios include: Access resource by: prepackaged download, Clip and Ship; Consume Web Resource

4.2.3. **Register Portal Resources** – Scenarios include: Register data resource, Register Web Service and Nominate Resource

4.2.4. **Harvest Portal Resources** – Scenarios include: Harvest FROM another portal and Harvest TO another portal

4.2.5. **Administer Portal** – Scenarios include: Maintain; Look and Feel, Security, and Communications

The following Logical Design documents describe system wide features.

4.2.6. **System Security Features** – Portal will employ role based security controls as outlined in Security Features document.

4.2.7. **System Non-Functional Features** – Portal will support features outlined in the Non-Functional Features document.

4.2.8. **System Business Rules** – Portal will enable or support the business rules outlined in the Business Rules document.

Details for these use cases and associated scenarios are available at: wagic.wa.gov/gitea

4.3. Information Requested

The following questions are intended to gather information from vendors who may be able to provide the GIT Portal Project Team with software products, integrated solutions and services. There are five categories of questions:

1. General Vendor Questions
2. Portal Requirement Questions*****
3. Portal Logical Design Questions*****
4. System Features Questions
5. Costs, Training, and Support Questions

*****For Categories Two and Three, responses are keyed to the requirement or logical design element numbers referenced in sections 4.1 and 4.2 respectively.

4.3.1 General Vendor Information and Portal Approach

4.3.1.1 Generally describe your company, your customer base and typical customers, your products and services, and your specific competencies. Why is your company a good fit to help us with the GIT Portal Project?

Response:

4.3.1.2 Describe projects you have done that had implementation objectives similar to those of the GIT Portal Project. Please provide us with any references we could check to learn more about your company's products and capabilities.

Response:

4.3.1.3 What is your understanding of the problems we are trying to solve and the challenges we face? How have you addressed these problems and challenges for other clients?

Response:

4.3.1.4 Given your understanding of what we are trying to accomplish, what suggestions do you have about how we could improve our logical design model and approach to the GIT Portal Project?

Response:

4.3.1.5 What implementation or support tasks, considerations, or risks should we further address in finalizing our project planning?

Response:

4.3.2 Requirements related Questions

For the Requirements listed in section 4.1 of this document please identify and briefly describe the specific product and components you would use to meet the Portal objectives. Also reference the underlying technologies used – operating systems, database management systems, sockets or plug-ins, etc. If the products come from different vendors, please clearly identify the vendors**.**

Response:

Requirement Number	***Product/ Component Description***	***Additional Comments / Qualifications***
4.1.1 Discovery		
4.1.2 Visualize		
4.1.3 & 4.1.10 - OGC Web Services		
4.1.4 Non OGC Services		
4.1.5 Location Navigation		
4.1.7* Component acquisition		
4.1.8 OGC Specs Compliance		
4.1.9 SGN Compatibility		
4.1.11* Catalog Services		

4.3.3 Proposed Logical Design related Questions

For the Proposed Logical Design Features listed in section 4.2 of this document please identify and briefly describe the specific products you would use to meet the Portal objectives. Also reference the underlying technologies used – operating systems, database management systems, programming languages, bundled components or tools, etc. If the products come from different vendors, please clearly identify the vendors**.**

Response:

Requirement Number	***Product/ Component Description***	***Additional Comments / Qualifications***
4.3.3.1 Discover Portal Resources a. Search By Location b. Search By Information Type c. Search By Browse		
4.3.3.2 Access Portal a. Prepackaged Download b. Clip and Ship c. Consume Web Service		
4.3.3.3 Register Portal Resource a. Register Data b. Register Web Service c. Nominate Resource		
4.3.3.4 Portal Harvesting a. Harvest FROM b. Harvest TO		
4.3.3.5 Portal Administration a. Maintain Security b. Maintain Web Site Look and Feel c. Maintain Communication with		

Actors d. Provide Feedback Mechanism		

4.3.4 System Feature Questions

4.3.4.1 System Security Features - A primary objective of Washington State is to create secure web-based applications that are easy to use, develop, and maintain. System Security Roles and Requirements are defined in Portal Security Requirements document. It is the intent of the portal initiative to utilize Secure Access Washington (SAW) a DIS authenticated gateway service. Please describe how your proposed solution security architecture compliments or integrates with SAW.

Response:

1. Is your solution compatible with LDAP protocol and Microsoft Active Directory authentication?
2. What administrative security controls are available?
3. Describe the role-based security features included with your product.
4. Describe the access control method(s) used by your product.
5. What other features should be considered to help improve security?

4.3.4.2 System and Scenario 'Non-Functional' Features

System Wide Non-Functional Requirements – these apply across all Use Cases and Scenarios please describe how you proposed solution would address these.

Response:

1. Browser support - Describe the web browsers that your products and proposed solution will support.
2. Pop-up Blockers - How is you proposed approach affected by browser pop-up blockers?
3. Response Time - What is typical response time between user command input to browser and system response?
4. Presentation Support - Describe how your solution supports a variety of browsers including, but not limited to: the MAC and PC versions of Internet Explorer, Netscape, Mozilla, AOL browsers, etc.
5. List which browsers and versions are compatible with your product solution.
6. Describe how your product renders on multiple devices (Tablet PC, PDAs, etc.).b. Server Platform – please specify server platform recommendations.

7. Please describe how your solution would implement the following

   User Feedback mechanism - provide access to user feedback mechanism from any web page

   User receive an automated confirmation (email) of an action when they request action or information – route request to administrator

   Usage Tracking – Provide the ability to track and report portal usage to administrator

   Search (Information Currency): always display ‘time period of content’ of metadata record when viewing resource metadata (both summary record and full record)

8. Harvesting – describe how your proposed solution would check Peer Portal links to ensure valid linkages on a scheduled basis

9. Download Data – describe how you proposed solution addresses the following for data download from the portal

   Compression Format – standard WinZip format

   Special FTP Security - http://techmall.dis.wa.gov/services/secure_file_transfer.aspx

   True URLs are masked from the user.

   Data produced from background processes cannot be downloaded by anyone but the user who performed the extract.

   File System Maintenance – system automatically removes user extracted datasets from file system 3 business days after they are created.

10. Maintain Portal – describe how you solution would meet these desired portal maintenance features

    Special Access – Portal maintenance console is available during normal operating hours from remote access locations through a secure connection.

    Special Security – The portal provides a secure connection between the administrator and the portal console that conforms to ISB Information Technology Security Standards (Policy No: 401-S2).

    Active System Monitoring – system provides auto notification to administrator if there is a problem with Portal

4.3.5 Costs, Training and Support Questions

4.3.5.1 Costs Please provide an overview of your pricing model(s). Include the following information:

Response:

- Component Costs of total solution?
- Cost of support agreement?
- Cost of tools required to maintain and extend the total solution
- Cost of product upgrades
- Consultation fee schedule

4.3.5.2 Training Please describe training for technical staff, both fee-based and free.

Response:

What types of training does your company provide (classroom, online, tutorials, etc.)?
Do you have any certified affiliates/partners that provide training for your products?
Are there alternative methods of training available (onsite, internet-based, etc.)?

4.3.5.3 Unique Features Describe any unique functionality that would increase the ease of use and that has not already been addressed.

4.3.5.4 Additional Hardware/Software If your solution requires the use of specific hardware or additional software that is not included as part of your solution in order to use any features, please specify.

4.3.6 Other Items we should consider

4.3.6.1 What do you consider the most frequent mistakes made in implementing a web portal?

4.3.6.2 What aspects of the GIT web portal should receive the most focus in any subsequent RFP that the state may release?

4.3.6.3 What do you consider the critical success factors for GIT web portal implementation projects?